

Curriculum Vitae

Sahar Allam

Present Address:

Fermi National Accelerator Laboratory
MS 127, PO Box 500, Batavia, IL 60510 USA
Tel: (630) 840-6506 · Fax: (630) 840-8274 · E-mail: sallam@fnal.gov
URL <http://home.fnal.gov/~sallam>

Born: 3 September 1964 in Dokki Giza, Egypt
US Visa: Permanent Resident ("Green Card") status
Martial Status: Married
Sex: Female

Education:

Ph.D., Astrophysics, Universität Potsdam, Germany	May 1998
Diploma, Goethe Institute, Göttingen, Germany	Apr – Dec 1993
M.Sc., Astronomy, Cairo University, Egypt	Nov 1991
Diploma, International School for Young Astronomers	10 – 28 Sep 1990
Postgraduate Courses, Astronomy, Cairo University, Egypt	Sep 1988
B.Sc., Astronomy, Cairo University, Egypt	May 1986

Ph.D. Dissertation:

Title: FIR Properties of Interacting Galaxies
Advisors: Prof. Günther Hasinger, Astrophysikalisches Institut Potsdam (AIP)
Dr. Rob Assendorp, AIP
Dr. habil. Gotthard Richter, AIP

M.Sc. Thesis:

Title: Interstellar Matter in Some External Galaxies
Advisors: Al-Shalapy, Cairo University, Egypt
Issa A. Issa, National Research Institute of Astronomy & Geophysics
(NRIAG) Helwan Observatory, Cairo, Egypt

Career:

Visiting Scientist, Fermilab	Dec 2000 – present
Postdoctoral Fellow, NMSU	Jun 2003 – July 2004
SNAP Calibration team member	Oct 2002 – present
Postdoctoral Researcher, NRIAG	Aug 1998 – Sep 2002
Visiting Scientist, Fermilab	Sep 1999 – Apr 2000
Visiting Scientist, Fermilab	Oct 1998 – Feb 1999
Ph.D. position, BAT IIa, AIP	Dec 1997 – May 1998
Ph.D. student, AIP	Dec 1993 – Nov 1997
Lecture Assistant, NRIAG	Mar 1992 – Dec 1993
Research Assistant, NRIAG	Feb 1987 – Jan 1992

Experience:

Study of merging pairs, isolated galaxies, compact groups, clusters of galaxies in the SDSS Data;	June 2003 – present NMSU/Fermilab
Study of SDSS EDR merging pairs, isolated galaxies, compact groups Study of compact groups in the Las Campanas Redshift Survey;	Dec 2000 – May 2003 Fermilab
Study of compact groups in the Las Campanas Redshift Survey; Teaching undergraduate astronomy courses; Analysis of high resolution FIR image processing	Apr 2000 – Dec 2000 NRIAG
Study of compact groups in the Las Campanas Redshift Survey; Analysis of high resolution FIR image processing	Sep 1999 – Apr 2000 Fermilab
Study of compact groups in the Las Campanas Redshift Survey; Teaching undergraduate astronomy courses; Analysis of high resolution FIR image processing	Feb 1999 – Sep 1999 NRIAG
Data Reduction and analysis for the SDSS PT; Study of compact groups in the Las Campanas Redshift Survey; Analysis of high resolution FIR image processing	Oct 1998 – Feb 1999 Fermilab
Teaching undergraduate astronomy courses; Analysis of high resolution FIR image processing	May 1998 – Oct 1998 NRIAG
High resolution FIR image processing using Maximum Entropy Techniques	Dec 1993 – May 1998 AIP
Observations and photometric reductions (Kottamia Observatory 74 in. telescope, Egypt)	1986 – 1991 NRIAG

Research Interests:

Galaxy environments, Interacting & merging galaxies, Velocity dispersion for galaxy clusters, Compact groups of galaxies, Isolated galaxies, Star formation, Far infrared photometry, AGNs Standard star systems, Star Clusters, Galactic Structure

Academic Awards:

Deutsche Akademische Austausch Dienst (DAAD) Fellowship, Grant # 562

Professional Societies:

Egyptian Astronomical Society
American Astronomical Society

Computing Skills:

Operating Systems: Linux, UNIX, VAX
Programming Languages: Tcl, mysql, FORTRAN, awk, java
Astronomical Processing: astrotools, sdssQT, IRAF, GAIA, SExtractor, Starburst99, Gipsy, MaxEnt

Refereed Publications:

- Issa A., **Allam S.**, 1991, ‘Surface Distribution of Dark Clouds in M31 II,’ Ap&SS, 176, 275
- Issa A., **Allam S.**, Al-Shalapy M., 1992, ‘Absorption Gradient in Some Galaxies IV,’ Ap&SS, 189, 123
- Issa A., **Allam S.**, 1992, ‘Absorption Gradient in Galaxies V,’ Ap&SS, 190, 57
- Allam S.**, Assendorp R., Longo G., Richter G., 1995, ‘The Far-IR Emission from Compact Groups of galaxies,’ P&SS, 43, 1371
- Allam S.**, Assendorp R., Longo G., Braun M., Richter G., 1996, ‘Far Infrared Properties of Hickson Compact Groups of Galaxies. I. High Resolution IRAS Maps and Fluxes,’ A&AS, 117, 39
- Allam S.**, Tucker D., Lin H., Hashimoto Y., 1999, ‘Star Formation in Las Campanas Compact Groups,’ ApJL, 522, 89
- Allam S.**, Tucker D., 2000, ‘Compact Groups in the Las Campanas Redshift Survey,’ Astr. Nachr., 321, 101
- Tucker D., et al., 2000, ‘Loose Groups of Galaxies in the Las Campanas Redshift Survey,’ ApJS, 130, 237
- Smith J. A., Tucker D., **Allam S.**, Rodgers, C., 2003, ‘Local $u'g'r'i'z'$ Standard Stars in the Chandra Deep Field–South’, 2003, ApJ, 126, 2037
- Einasto, J., et al., 2003, ‘Clusters and superclusters in the Sloan Digital Sky Survey’ A&A, 405, 425
- Einasto, J., et al., 2003, ‘Clusters and Superclusters in the Las Campanas Redshift Survey’ A&A, 410, 425
- Hütsi, G., et al. 2003, ‘Luminosity function and density field of the Sloan and Las Campanas Redshift Survey’, A&A, submitted (astro.ph.0212327)
- Abazajian et al. 2003, ‘The First Data Release of the Sloan Digital Sky Survey’ AJ, 127, 2081
- Doroshkevich, A., Tucker, D., **Allam S.**, 2004, ‘Large Scale Structure in the SDSS Galaxy Survey’, A&A, 418, 7
- Allam S.**, et al. 2004, ‘Merging Galaxy Pairs in the SDSS Early Data Release,’ ApJ, 127, 1883
- Lee B., **Allam S.**, Tucker D., et al. 2004, ‘Compact Groups in the SDSS Early Data Release,’ ApJ, 127, 1811
- Rider C., et al., 2004, ‘A Survey of Southern Hemisphere Open Clusters in the $u'g'r'i'z'$ Filter System: I. Results for NGC2548 (M48)’, ApJ, 127, 2227
- Doroshkevich, A., Tucker, D. L., **Allam, S.**, Way, M. J., 2004 ‘Large Scale Structure in the SDSS DR1 Galaxy Survey’, A&A, 418, 7
- Abazajian et al. 2004, ‘The Second Data Release of the Sloan Digital Sky Survey’, AJ, 128, 502
- Finkbeiner, et al. 2004, ‘The Sloan Digital Sky Survey Commissioning Data:Orion’, in press AJ
- Allam S.**, et al. 2004, ‘Isolated Galaxies in the SDSS DR1 Data Release’, submitted

- Abazajian et al. 2004, ‘The Third Data Release of the Sloan Digital Sky Survey’ submitted
- Allam S.**, et al. 2004, ‘Merging Galaxy Pairs in the SDSS DR2,’ in preparation
- Moore, C., et al. 2004, ‘A Survey of Southern Hemisphere Open Clusters in the $u'g'r'i'z'$ Filter System: II. Results for NGC 6134 and Hogg 19’, in preparation
- Rider C., et al., 2005, ‘A Survey of Southern Hemisphere Open Clusters in the $u'g'r'i'z'$ Filter System: V. Results for Nine Well Characterized Clusters’ in preparation
- Cantrell, K., et al., 2005, ‘A Survey of Southern Hemisphere Open Clusters in the $u'g'r'i'z'$ Filter System: IV. Results for NGC 1647’ in preparation
- Allam S.**, et al. 2005, ‘Isolated Galaxies in the SDSS DR3 Data Release’, in preparation
- Rodgers, C., et al., 2005, ‘A Survey of Southern Hemisphere Open Clusters in the $u'g'r'i'z'$ Filter System: III. Results for NGC 2588’, in preparation

Conference Proceedings and Others:

- Allam S.S.**, Issa A. 1992, ‘Surface Distribution of Dark Clouds in M31: Absorption Gradient along the Minor Axis and in the R and θ Direction II,’ *Fourth Scientific General Meeting of NRIAG*, Nov. 23-28, 1992
- Issa A., **Allam S.**, Al-Shalapy M. 1992, ‘Absorption Gradient in Some Galaxies IV,’ *Fourth Scientific General Meeting of NRIAG*, Nov. 23-28, 1992
- Issa A., **Allam S.S.** 1992 ‘Absorption Gradient in Galaxies V,’ *Fourth Scientific General Meeting of NRIAG*, Nov. 23-28, 1992
- Allam S.**, Assendorp R., Longo G., Richter G. 1994, ‘Far Infrared Catalogue for Hickson Compact Groups,’ *Astronomische Gesellschaft Tagung*, Potsdam, Sep. 26-30, 1994
- Allam S.S.**, 1997, ‘High Resolution Study of Interacting Galaxies,’ *Astronomische Gesellschaft Tagung*, Berlin, Nov. 18-19, 1997
- Allam S.S.**, Tucker, D.L., 1998, ‘Compact Groups of Galaxies in the Las Campanas Redshift Survey,’ BAAS, *193rd Meeting of the AAS*, #02.03
- Allam S.S.**, 1999 ‘FIR Properties of Hickson Compact Groups of Galaxies,’ *Sixth General Scientific Meeting of NRIAG*, Nov. 9-12, 1999
- Allam S.**, Tucker D.L., 2000, ‘An Atlas of Compact Groups from the Las Campanas Redshift Survey,’ BAAS, *195th Meeting of the AAS*, #12.08
- Allam S.S.** 2000, ‘Las Campanas Compact Groups: Star Formation Properties,’ in *Small Galaxy Groups*, IAU Colloquium 174, ASP Conf. Series, Vol. 209, eds. M. J. Valtonen & C. Flynn, (San Francisco: ASP), p. 355
- Allam S.S.**, Tucker D.L., 2000, ‘Physical Properties of Compact Groups of Galaxies in the Las Campanas Redshift Survey,’ *Eighth General Scientific Meeting of NRIAG*, Nov. 11-15, 2000
- Lee B., Tucker D., **Allam S.** 2001, ‘Compact Groups of Galaxies in the SDSS Early Data Release,’ BAAS, *199th Meeting of the AAS*, #110.019

- Doroshkevich A., Tucker D., Vanden Berk D., **Allam S.S.**, 'Spatial Distribution of Quasars in the 2QZ 10K Release and the SDSS Early Data Release,' in *Lighthouses of the Universe*, eds. A. J. Banday et al., (Springer Verlag), p524
- Lamb, D.Q., Snedden, S., vanden Berk, D.E., **Allam S.**, Tucker, D.L., Lee, B.C., Harvanek, M., Kleinman, A.N., Kleinman, S., Krzesinski, J., Long, D., Newman, P.R., 2002, 'GRB020531(=H2042): optical observations,' GRB Circular Network, 1403, 1
- Hackman C.L., Smith J.A., Canterna R.W., Tucker D.L., Neilsen E.H., **Allam S.S.**, Stoughton C., Chen B., Newberg H.J., Pier J.R., 'An Investigation of the Age and Metallicity of Galactic Star Clusters' BAAS, *200th Meeting of the AAS*, #09.03
- Smith J.A., Rodgers C.T., Tucker D.L., **Allam S.S.**, Jorgensen A., 'The Southern Hemisphere $u'g'r'i'z'$ Standard Star Network,' BAAS, *200th Meeting of the AAS*, #58.06
- Allam S.S.**, Tucker D.L., 'Interacting/merging pairs in the SDSS EDR' BAAS, *200th Meeting of the AAS*, #40.12
- Newman, P.R, Lamb, D.Q., Tucker, D.L., **Allam S.**, Lee, B.C., , vanden Berk, D.E., Harvanek, M., Kleinman, A.N., Kleinman, S., Krzesinski, J., Long, D., Snedden, S., on behalf of the SDSS GRB team, 2002, 'GRB021112 (=H2448): optical observations,' GRB Circular Network, 1695, 1
- Allam S.S.**, Tucker D.L., Smith J.A., 2002, 'Properties of Merging Pairs in the SDSS EDR' BAAS, *201th Meeting of the AAS*, #52.09
- Smith J.A., Tucker D.L., **Allam S.S.**, Jorgensen A., 2002, 'Southern Standard Stars for the $u'g'r'i'z'$ System' IAUS, 216, 102
- Smith, J.A., et al. 2002, 'The Snap Standard Star Program' BAAS, *201th Meeting of the AAS*, #104.08
- Smith, J.A., et al. 2003, 'Calibration of the Snap Program' IAUS, 216, 102
- Deustua, S.E., et al., 2003, 'Calibration of the Snap Program' SPIE, 5164, 84
- Cantrell, K.A., et al., 2003, 'Study of NGC 1647 in the $u'g'r'i'z'$ Filter System' BAAS, *203rd Meeting of the AAS*, #1409
- Rodgers, C.T., et al., 2003, 'The Open Cluster NGC 2588 in the $u'g'r'i'z'$ Filter System' BAAS, *203rd Meeting of the AAS*, #1419
- Deustua, S.E., et al. 2003, 'Calilbration Program for SNAP' BAAS, *203rd Meeting of the AAS*, #8221
- Stute, J.L., Smith, J.A., Tucker, D.L., **Allam, S.S.**, Rodgers, C.T., 2003 'Bright $u'g'r'i'z'$ Standard Stars in the E-Regions' BAAS, *203rd Meeting of the AAS*, #5704
- Smith, J.A., et al. 2003 'The SNAP Standard Star Program' BAAS, *203rd Meeting of the AAS*, #8222
- Kent, S., et al. 2003, 'Observations of Candidate Faint Spectrophotometric Standards in the SNAP-North Field' BAAS, *203rd Meeting of the AAS*, #8223
- Tucker, D.L., **Allam, S.S.** 'Isolated Galaxies in the SDSS DR1' 2003 BAAS, *203rd Meeting of the AAS*, #9101

Allam, S.S., Tucker, D.L., 2003, 'SDSS DR1 Merging Galaxies' BAAS, *203rd Meeting of the AAS*, #12209

Allam, S.S., Tucker, D.L., SDSS Collaboration, 2004, 'SDSS DR2 Merging pairs' BAAS, *204th Meeting of the AAS*, #4312

Tucker, D.L., **Allam, S.S.**, SDSS Collaboration, 2004, 'Properties of Isolated Galaxies in the SDSS DR2' BAAS, *204th Meeting of the AAS*, #4313

Other accomplishments include:-

- I helped with the SDSS collaboration meeting at NMSU.
- I worked on testing DR2 CAS at Fermilab. (included in the half-time duty for the NMSU position)
- I worked on setting up the DR2 DAS at Fermilab. (included in the half-time duty for the NMSU position)
- I worked on setting up the interface for DR1 DAS at Fermilab.
- I worked on testing the DR1 DAS at Fermilab.
- I worked on setting up the interface for DR1 CAS at Fermilab.
- I worked on testing the DR1 CAS at Fermilab.

References:

(1) Prof. Rene Walterbos

Address: New Mexico State University
Astronomy Department
Box 30001
1320 Frenger St.
Las Cruces, NM 88003

Tel: (505) 646-5990 (Office)
(505) 646-1602 (FAX)

E-mail: rwalterb@nmsu.edu

(2) Prof. Chris Stoughton (Deputy Head, Experimental Astrophysics Group, Fermilab)

Address: Fermi National Accelerator Laboratory
P.O. Box 500 MS 127
Batavia, IL 60510

Tel: (630) 840-2440 (Office)
(630) 840-8274 (FAX)
E-Mail: stougo@fnal.gov

(3) Prof. J. Allyn Smith

Address: Los Alamos National Laboratory
NIS-4, MS D448
Los Alamos
NM 87544-1724

Tel: 505-667-0425 (Office)
505-665-4657 (FAX)
E-Mail: jasman@nis.lanl.gov

(4) Dr. Bryan E. Laubscher

Address: Los Alamos National Laboratory
NIS-4, MS D448
Los Alamos,
NM 87544-1724

Tel: (505) 667-1804 (Office)
(505) 665-4657 (Fax)
E-Mail: blaubscher@lanl.gov

(5) Dr. Brian C. Lee

Address: Lawrence Berkeley National Lab
Bldg 50R5032 MS 50-232
1 Cyclotron Rd
Berkeley CA 94720-8160

Tel: 510-495-2475 (Office)
FAX: 510-486-6738
E-Mail: blee@lbl.gov